

Our Reference No.: 15499.185

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Appellant	:	Larry Stevens)	
)	
Appl. No.	:	09/228,325)	
)	
Filed	:	January 11, 1999)	Group Art Unit: 3711
)	
Title	:	SYSTEM AND METHOD)	
		FOR BONDING AN ACRYLIC)	
		SURFACE TO A FRAME)	
)	
Examiner	:	Michael S. Chambers)	
)	
Confirm. No.:	:	8737)	
)	
Customer No.	:	22,913)	

REPLY BRIEF

Mail Stop: Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

An Examiner's Answer was mailed on May 30, 2008. Appellant submits this Reply Brief in response to the Examiner's Answer.

Appellant appeals the rejection of all of the pending claims.

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I. Status of Claims

The Final Office Action dated February 9, 2006 rejected Claims 1, 2, 5-18 and 44-53, which are all the pending claims.

Specifically, the Office Action rejected Claims 1, 2, 5, 6, 14 and 15 under 35 U.S.C. § 103(a) as being unpatentable over applicant's admitted prior art in view of U.S. patent no. 6,056,622 issued to Chung; U.S. patent no. 3,809,401 issued to Hankele; U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedelecki, et al.; and Dow Corning Data Sheet Q3-6093. The Office Action rejected Claims 44-53 in view of the Claim 1 rejection discussed above. Claims 2, 5-18, and 50-53 were also rejected under Section 103(a).

Appellant appeals the rejection of all the pending claims. That is, Applicant appeals the rejection of Claims 1, 2, 5-18 and 44-53.

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II. Grounds of Rejection to be Reviewed on Appeal

Issue 1: Did the Examiner fail to establish a *prima facie* case of obviousness of independent Claims 1, 14, 44, 46, 48, 50 and 52 where there is no evidence of any teaching, suggestion, motivation or other reason why a person of ordinary skill would have combined the references to arrive at the claimed invention?

Issue 2: Whether Claims 1, 2, 5-18 and 44-53 are unpatentable under 35 U.S.C. § 103(a) over applicant's admitted prior art in view of United States patent no. 6,056,622 issued to Chung; U.S. patent no. 3,809,401 issued to Hankele; U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedelecki, et al.; Dow Corning Data Sheet Q3-6093; Official Notice taken by the Examiner; and Ichemco.

(a) Whether Claims 1, 2, 5, 6, 14 and 15 are unpatentable under 35 U.S.C. § 103(a) over applicant's admitted prior art in view of United States patent no. 6,056,622 issued to Chung; U.S. patent no. 3,809,401 issued to Hankele; U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedelecki, et al.; Dow Corning Data Sheet Q3-6093.

(b) Whether Claims 7-13 and 16-18 are unpatentable under 35 U.S.C. § 103(a) over applicant's admitted prior art in view of United States patent no. 6,056,622 issued to Chung; U.S. patent no. 3,809,401 issued to Hankele; U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedelecki, et al.; and Dow Corning Data Sheet Q3-6093 in view of Official Notice.

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- (c) Whether Claims 44 and 45 are unpatentable under 35 U.S.C. § 103(a) over applicant's admitted prior art in view of United States patent no. 6,056,622 issued to Chung; U.S. patent no. 3,809,401 issued to Hankele; U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedelecki, et al.; and Dow Corning Data Sheet Q3-6093.
- (d) Whether Claims 46 and 47 are unpatentable under 35 U.S.C. § 103(a) over applicant's admitted prior art in view of United States patent no. 6,056,622 issued to Chung; U.S. patent no. 3,809,401 issued to Hankele; U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedelecki, et al.; and Dow Corning Data Sheet Q3-6093.
- (e) Whether Claims 48 and 49 are unpatentable under 35 U.S.C. § 103(a) over applicant's admitted prior art in view of United States patent no. 6,056,622 issued to Chung; U.S. patent no. 3,809,401 issued to Hankele; U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedelecki, et al.; and Dow Corning Data Sheet Q3-6093.
- (f) Whether Claims 50 and 51 are unpatentable under 35 U.S.C. § 103(a) over applicant's admitted prior art in view of United States patent no. 6,056,622 issued to Chung; U.S. patent no. 3,809,401 issued to Hankele; U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedelecki, et al.; and Dow Corning Data Sheet Q3-6093.

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(g) Whether Claims 52 and 53 are unpatentable under 35 U.S.C. § 103(a) over applicant's admitted prior art in view of United States patent no. 6,056,622 issued to Chung; U.S. patent no. 3,809,401 issued to Hankele; U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedelecki, et al.; and Dow Corning Data Sheet Q3-6093.

(h) Whether Claims 50-53 are unpatentable under 35 U.S.C. § 103(a) over applicant's admitted prior art in view of Ichemco, web page downloaded on 6/24/05, <http://www.ichemco.it/ENG/tab/siliconepsa.asp> (cited by Examiner Chambers in non-final Office Action mailed on July 1, 2005).

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III. Argument

In the Amended Appeal Brief, Appellant argued that the pending claims were patentable over the cited art and that the Examiner's rejections failed to establish a *prima facie* case of obviousness. In the Answer, the Examiner—while not agreeing with Appellant's arguments—did not attempt to refute them.¹ Instead, the Examiner presented “two other avenues” for sustaining the rejections and then briefly discussed Appellant's evidence of secondary considerations. As discussed below, these “two other avenues” are dead ends.

The first “other avenue” asserted in the Examiner's Answer was “combining prior art elements according to known methods to yield predictable results.” This first avenue requires, *inter alia*, that (1) the prior art include each claimed element; (2) one of ordinary skill in the art could have combined the elements as claimed by known methods; and (3) one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As discussed in the Amended Appeal Brief, at the time of Applicant's invention, double-sided tape with a foam center was used between the brittle acrylic backboard and the frame to provide the necessary cushioning, adhesion and flexibility. Without the double-sided tape with a foam center, one of ordinary skill in the art would have expected the backboard to break because there was nothing to dissipate the energy applied to the backboard and cushion the impact.

Therefore, the understanding of one of ordinary skill in the art at the time of Applicant's invention would have been that the backboard would break if directly connected to the frame because there was no cushioning between the backboard and the frame. Thus, the combination alleged by the

¹ See Answer, at 8-9.

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Examiner would not have provided any expectation of success because one of ordinary skill in the art would have expected this combination to fail. Because there is no evidence or findings that one of ordinary skill in the art would have recognized that the results of such a combination would have been successful, the Examiner's first avenue does not support a finding of obviousness.

The second "other avenue" asserted in the Examiner's Answer was "applying a known technique to a known device to obtain a predictable result." This second avenue requires, *inter alia*, (1) the prior art contained a known device; (2) the prior art contained a known technique that is applicable to the known device; and (3) one of ordinary skill in the art would have recognized that applying the known technique would have yielded predictable results.

The Examiner's second avenue fails the second prong of this test because it was not known at the time of the invention to use an adhesive to directly connect a backboard to the frame nor did any prior art predict that such a technique would be successful. In contrast, as discussed above, one of ordinary skill in the art would have predicted an unsuccessful result by directly connecting the backboard to the frame because it would not have the required cushioning, adhesion and flexibility that was provided by the prior art double-sided tape with a foam center.

In conclusion, the Examiner's two "other avenues" fail because one of ordinary skill in the art at the time of the invention would have predicted failure, not success. Accordingly, Applicant requests that these "other avenues" be rejected by the Board.

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A. No prima face case of obviousness was established by the first "other avenue" because its analysis rests upon non-analogous art

In addition to failing to provide any evidence or findings that one of ordinary skill in the art would have recognized that the results of such a combination would have been successful, the Examiner relies upon non-analogous art. Specifically, the Examiner's Answer relies upon references that disclose a ball with unpredictable bounce characteristics (U.S. patent no. 6,056,622 issued to Chung); a hockey stick with a flexible net for catching and stopping a puck in both the forehand and backhand position (U.S. patent no. 3,809,401 issued to Hankele); and a safety tip of a water sport board, such as a surf board, for reducing or preventing injury to a user upon impact with the nose portion of the board (U.S. patent nos. 4,792,316 and 4,955,314 issued to Skedleski, et al.).²

As already explained in Appellant's Amended Appeal Brief,³ constructing rubber balls, hockey sticks or surf boards is not analogous to attaching basketball backboards to backboard frames. In addition, the Examiner's conclusory statements that "various attachment means can be used throughout a class of sport equipment" and "if it works on a ball or a surfboard to secure two items, the artisan would conclude it might work on securing a backboard to its frame" does not somehow make the art analogous.⁴ In contrast, one of ordinary skill in the art would have looked to this analogous art. Furthermore, even if one of ordinary skill in the art looked to the non-analogous art cited by the Examiner, this non-analogous art does not teach, suggest or disclose the claimed

² See Answer, at 9 (citing "Chung, Hankele or Skedleski").

³ See, e.g., Amended Appeal Brief, at 30 ("In essence, the Examiner argues that any use of an adhesive in assembling any device used in any sport is analogous to attaching a basketball backboard and a basketball frame-- simply because basketball is a sport. This goes too far.").

⁴ Answer, at 9.

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invention. In addition, even if this non-analogous art was added to the Examiner's two "other avenues" discussed above, one of ordinary skill in the art still would not have predicted that such a combination would have yielded a successful result.

B. No prima face case of obviousness was made by the "other avenues" because the Examiner failed to provide any evidence that, prior to the Appellant's invention, one of ordinary skill in the art would have considered the conventional double-sided tape systems costly to manufacture

In the Answer, the Examiner argued that one of ordinary skill in the art would have considered conventional double-sided tape systems deficient and, in particular, costly to manufacture.⁵ The Examiner argued that, in view of this deficiency, one of ordinary skill "may have been looking to apply various equivalent attachment means in order to lower the cost of manufacturing"⁶ and "would be motivated to try various adhesives that provide similar cushioning effects at a lower cost."⁷ The Examiner concluded that, with this motivation, one of ordinary skill would have had a reason to modify the conventional double-sided tape systems to create Appellant's system, which has lower manufacturing costs.⁸ As explained below, the Examiner failed to provide any evidence that, prior to Appellant's invention, one of ordinary skill in the art would have considered the double-sided tape systems costly to manufacture.

The present application's background section states that, in some prior art basketball systems,

⁵ See Answer, at 9 (arguing that a person of ordinary skill would have "a problem in this area with regards to cost").

⁶ Answer, at 10.

⁷ Answer, at 11.

⁸ See Answer, at 10-11.

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double-sided tape with a foam center was used to connect acrylic backboards to frames.⁹ In particular, it notes that manual labor was used “to prepare the acrylic backboard surface and frame surface,” “to manually lay the tape” on the frame; and “to press the taped backboard and frame together.”¹⁰

Appellant filed the present application, in part, because his invention was a substantial improvement over conventional basketball systems. For example, Appellant stated in the background section of the application: “A significant problem with the use of the two-sided tape described above is the time and labor required to apply the tape to the frame.”

Citing the Appellant’s background, the Examiner argued, “If the applicant had this problem, other artisans of equal ordinary skill in the art would naturally also be having a problem in this area with regards to cost[.]”¹¹ But as noted above, the double-sided-tape process looks labor-intensive and time-consuming when compared with Appellant’s invention.

The Examiner provided no evidence that, prior to Appellant’s invention, one of ordinary skill in the art would have considered this double-sided-tape process labor-intensive, time-consuming or costly. Instead, the Examiner merely (1) cited Appellant’s own evidence of secondary considerations which support a finding of non-obviousness by showing the cost benefits of the claimed invention,¹² and (2) stated, without any supporting evidence or explanation, that “[c]ommon sense would indicate that one of ordinary skill in the art would be motivated to try various adhesives that provide similar

⁹ See Application, at 2:3-14.

¹⁰ See *id.*

¹¹ See Answer, at 9.

¹² See Answer, at 10 (arguing that “the use of silicon adhesives is a lower cost alternative to the method of utilizing

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cushioning effects at a lower cost.”¹³ Consequently, the first and second “other avenues” fail to make a *prima facie* case of obviousness because they rely upon the Examiner’s unsupported speculation that, prior to appellant’s invention, one of ordinary skill would have had a reason to look at “various equivalent attachment means” to lower manufacturing costs.

Contrary to the Examiner’s argument, Appellant submits that the mere fact that an invention is superior does not make that invention obvious. In further detail, the Examiner noted that one of ordinary skill “would always be open to reducing manufacturing costs.”¹⁴ The Examiner apparently reasoned that, since the Appellant’s system has lower manufacturing costs, it would have been obvious to modify the conventional double-sided tape systems to reach Appellant’s system.¹⁵ If this reasoning were sufficient to prove obviousness, this would arbitrarily preclude patents for virtually all improved, lower cost systems and methods. This goes too far. Merely showing the Appellant’s system’s superiority is insufficient to establish a *prima facie* case of obviousness.

C. No *prima facie* case of obviousness was made by the first and second “other avenues” because they rely upon the unsupported premises that it was a known method or technique (1) to use an elastomeric adhesive to attach a basketball backboard to a frame or (2) to replace double-sided foam tape with an elastomeric adhesive

The Examiner argued that appellant “has not modified the application of the adhesive beyond following *normal installation instructions* provided by the manufacturer”; that the applicant “is applying a known technique (*following manufacturer’s instructions*)”; that the “application of a

foam tape[.]”).

¹³ See Answer, at 11.

¹⁴ See Answer, at 10.

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catalyzed elastomeric adhesive utilizing its *normal application directions* would be obvious”; that the claims cover uses “*prescribed by*” the adhesive manufacturers; and the appellant used adhesives “according to the manufacturer’s *recommended installation instructions*[.]”¹⁶

The Dow Corning Data Sheet Q3-6093 and the General Electric Data Sheet D1-SEA 210, however, do not instruct the reader that their adhesives should be used to attach a basketball backboard to a frame. Moreover, the Dow Corning Data Sheet Q3-6093 and the General Electric Data Sheet D1-SEA 210 do not instruct the reader that their adhesives should be used to replace double-sided foam tape in any context, much less the basketball backboard and frame context. In fact, the Examiner has not cited any evidence, prior to Appellant’s invention, that the Dow Corning Data Sheet Q3-6093 and the General Electric Data Sheet D1-SEA 210 adhesives (or any elastomeric adhesive) could or should be used to replace double-sided foam tape in any context, much less the basketball backboard and frame context.

In sum, no *prima facie* case was made because the Examiner failed to show that it was a known method or technique (1) to use an elastomeric adhesive to attach a basketball backboard to a frame or (2) to replace double-sided foam tape with an elastomeric adhesive in the basketball backboard and frame context.

Appellant notes the Examiner’s Answer implied Appellant argued that the Dow Corning Data Sheet Q3-6093 was entirely irrelevant.¹⁷ To the contrary, on page 6 of the present application,

¹⁵ See Answer, at 10.

¹⁶ See Answer, at 10-11 & 13 (emphasis added).

¹⁷ See Answer, at 11 (arguing that Appellant “seems not to see the relevance of citing the Dow Corning Data Sheet Q3-6093”).

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Appellant expressed his conclusion that the General Electric D1-SE 210 adhesive and the Dow Corning Q3-6093 adhesive were some suitable options: "Suitable silicone adhesive has been obtained from General Electric (D1-SEA 210) from Dow Corning (Q3-6093)."

Appellant argued that the Dow Corning Data Sheet Q3-6093 and the General Electric Data Sheet D1-SEA 210 themselves do not suggest that their adhesives were suitable for attaching a basketball backboard to a frame. Moreover, the Examiner has not cited any evidence—prior to Appellant's invention—that teaches that the Dow Corning Data Sheet Q3-6093 and the General Electric D1-SEA 210 adhesives (or any elastomeric adhesive) could or should be used to replace double-sided foam tape in the basketball backboard and frame context. Accordingly, the Dow Corning Data Sheet Q3-6093 and the General Electric Data Sheet D1-SEA 210 do not render the claimed invention obvious, and it was not a known method or technique to use such adhesives in the basketball backboard and frame context.

D. Appellant's evidence of secondary considerations rebuts the "other avenues" and the rejections below

As explained in Appellant's Amended Appeal Brief, the secondary considerations evidence shows that, after having used the conventional double-sided tape systems for six years, Assignee Lifetime Products Inc. began using the claimed invention in 1999, and that only afterwards in 2001, did its competitor (Huffy Sports) switch from the conventional double-sided tape systems to the claimed invention.¹⁸ Thus, Huffy Sports copied the claimed invention.

¹⁸ See Amended Appeal Brief, at 30-32.

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Moreover, as explained in Appellant's Amended Appeal Brief, the secondary considerations evidence shows that switching from the conventional double-sided tape systems to the claimed invention could save a company up to 62.5% in labor costs plus millions of dollars in material costs.¹⁹ Yet, despite the significant advantages of the claimed invention, both Assignee Lifetime Products and competitor Huffy Sports used conventional double-sided tape systems for years before switching to the claimed invention. And Huffy Sports didn't switch to the claimed invention until two years after Assignee Lifetime Products began using it. This evidence of secondary considerations demonstrates that the claims are patentable and, even if the Examiner had provided a *prima facie* case of obviousness, would rebut any such legal conclusion of obviousness.

E. The Examiner's attempt to discredit Appellant's secondary considerations evidence is inconsistent with his obviousness rejections

In the Answer, the Examiner argued that it would be obvious to modify the conventional double-sided tape systems to reach Appellant's system because, according to the Examiner, using silicone adhesives is old and well known.²⁰ But in attempting to discredit Appellant's secondary considerations evidence, the Examiner assumed silicone adhesives are not well known and, instead, "fairly new to the marketplace[.]"²¹ The Examiner cannot have it both ways. He may not claim silicone adhesives to be old and well known when making his obviousness arguments, but new and

¹⁹ See Amended Appeal Brief, at 32-33.

²⁰ See, e.g., Answer, at 9 ("The use of silicon adhesives in the sport's art is well known as shown by Chung, Hankle or Skedelski.").

²¹ See, e.g., Answer, at 14. The Examiner provides no plausible explanation how the adhesives in the Dow Corning Data Sheet Q3-6093 (dated 1994) and the General Electric Data Sheet D1-SEA 210 (dated 1987) were somehow new at the time the present application was filed in 1999.

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not well known when attempting to discredit Appellant's secondary-considerations evidence.

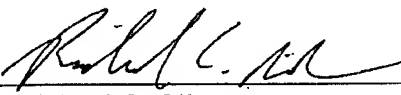
IV. Conclusion

For at least for the forgoing reasons, Applicant requests that the original rejections set forth by the Examiner and the "other avenues" raised in the Answer should be overturned. Applicant also requests that the Board reverse the Examiner's rejections of Claims 1, 2, 5-18 and 44-53.

The Commissioner is authorized to charge payment of any additional fees associated with this communication, which have not otherwise been paid, to Deposit Account No. 23-3178. If any additional extension of time is required, which has not otherwise been requested, please consider this a petition therefore and charge any additional fees that may be required to Deposit Account No. 23-3178.

Respectfully submitted,

Dated: July 30, 2008

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